

REMARKS

Claim 43 has been currently amended to comply with the correction requirement of the Office. Claims 45-47, 49 and 52-55 are cancelled. Applicant reserves the right to file one or more divisional or continuation applications pertaining to the cancelled claims. It is believed that claims 43, 44, 48, and 51 are in condition for allowance. No new matter has been added. Entry of said amendment and reconsideration is respectfully requested.

Specification

The objection to the specification due to unclear direction regarding the first line of the specification is traversed. Applicants by way of the above amendment have corrected the request for amendment to reflect the current state of the specification. Withdrawal of the instant objection is respectfully requested.

The rejection of claim 45, 52 under 35 U.S.C. 103(a) as being unpatentable over Smith et al. (Annals of the Entomological society of America 1970) in view of Paganessi et al. (US Pat. 5,943,815) is respectfully traversed.

The Office states that Smith et al. teaches that the combination of lactic acid and carbon dioxide is an effective *A. aegypti* mosquito attractant (Pg. 766,767). The Office further states that Paganessi et al. (US Pat. 5,943,815) teach that the combination of acetone with carbon dioxide is an effective attractant for mosquitoes (Column 2, lines 53-68, Column 3, lines 1-25).

The Office further states that Smith et al. discloses that the combination of lactic acid and carbon dioxide is an effective mosquito attractant. The Office further states that the difference between Smith et al. and the claimed invention is that Smith et al. does not

expressly disclose compositions and methods of attracting mosquitoes consisting of lactic acid, acetone and carbon dioxide. The Office further states that however, the prior art amply suggests the same as Paganessi et al. discloses that the combination of acetone with carbon dioxide is an effective attractant for mosquitoes. The Office further states that as such it would have been well within the skill of and one ordinary skill in the art would have been motivated to combine lactic acid, acetone and carbon dioxide with the expectation that the same would be effective in attracting mosquitoes. The Office further states that the Examiner has duly considered the Applicant's arguments but deems them unpersuasive.

The Office then proceeds to summarize the findings of the Supreme Court in *KSR International Co. v. Teleflex Inc.*, by stating the following:

(1) The obviousness analysis need not seek out precise teachings directed to the subject matter of the challenged claim and can take into account the inferences and creative steps that one of ordinary skill in the art would employ;

(2) the obviousness analysis cannot be confined by a formalistic conception of the words teaching, suggestion and motivation, or by overemphasis on the importance of published articles and the explicit content of issued patents;

(3) it is error to look only the problem the patentee was trying to solve-any need or problem known in the field of endeavor at the time of invention and addressed by the prior art can provide a reason for combining the elements in the manner claimed;

(4) it is error to assume that one of ordinary skill in the art in attempting to solve a problem will be led only to those elements of prior art designed to solve the same problem-common sense teaches that familiar items may have obvious uses beyond their primary purposes and in many cases one of ordinary skill in the art will be able to fit the teachings of multiple patents together like pieces of a puzzle (one of ordinary skill in the art is not automaton);

(5) it is error to assume that a patent claim cannot be proved obvious merely by showing that the combination of elements was "obvious to try". *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d

The Office further states that contrary to the Applicant's arguments, "obvious to try" is not excluded as a basis for obviousness. The Office further states that there is no requirement the prior art must set forth a motivation to modify or combine the references. The Office further states that in any case, "It is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose [T]he idea of combining them flows logically from their having been individually taught in the prior art." *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1049, 1072 (CCPA 1980) (citations omitted) (Claims to a process of preparing a spray-dried detergent by mixing together two conventional spray-dried detergents were held to be *prima facie* obvious.). See also *In re Crockett*, 279 F.2d 274, 126 USPQ 186 (CCPA 1960) (Claims directed to a method and material for treating cast iron using a mixture comprising calcium carbide and magnesium oxide were held unpatentable over prior art disclosures that the aforementioned components individually promote the formation of a nodular structure in cast iron.); and *Ex parte Quadranti*, 25 USPQ2d 1071 (BD. Pat. App. & Inter. 1992) (mixture of two known herbicides held *prima facie* obvious). The Office further states that since as indicated the compositions are each taught to be effective for attracting mosquitoes, it would have been obvious to combine the same with the expectation that the combination would be effective in attracting mosquitoes.

The Office further states that the scope of enablement rejection applied to prior broad claims, claiming mosquitoes in general. The Office further states that the since the claims are limited to those species which were enabled, the argument with respect to undue experimentation is not applicable herein. The Office further states that Smith et al. specifically discloses that the combination of lactic acid and carbon dioxide is effective for attracting *Aedes aegypti*. The Office further states that since Paganessi et al. discloses that the combination of carbon dioxide and acetone is an effective attractant for mosquitoes, one of ordinary skill in the art would have expected that adding acetone to the combination of lactic acid and carbon dioxide would also be attractive to *Aedes aegypti*. The Office finally states that therefore the claimed invention as a whole, would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention

was made, because every element of the invention has been collectively taught by the combined teachings of the references.

Claims 45 and 52 have been cancelled in the present invention.

The rejection of claim 46, 47, 53, 54 under 35 U.S.C. 103(a) as being unpatentable over Smith et al. (Annals of the Entomological society of America 1970) in view of Wilson et al. (US Pat. 4,818,516) is respectfully traversed.

The Office states that Smith et al. teaches that lactic acid and the combination of lactic acid and carbon dioxide are effective *Aedes aegypti* mosquito attractants (Pg. 766). The Office further states that Wilson et al. teaches that dimethyl disulfide is effective in attracting mosquitoes (Column 8, lines 44-60).

The Office further states that Smith et al. teaches that lactic acid and the combination of lactic acid and carbon dioxide are effective mosquito attractants. The Office further states that the differences between Smith et al. and the claimed invention is that Smith et al. does not expressly disclose composition or methods for attracting mosquitoes consisting of lactic acid and dimethyl disulfide or lactic acid, dimethyl disulfide and carbon dioxide. The Office further states that however, the prior art amply suggests the same Wilson et al. discloses that dimethyl sulfide is known to be an attractant for mosquitoes. The Office further states as such it would have been well within the skill of and one of ordinary skill in the art would have been motivated to modify the prior art as above with the expectation that the combination lactic acid and dimethyl disulfide and the combination of lactic acid, dimethyl disulfide and carbon dioxide would be effective in attracting mosquitoes. See *In re Kerkhoven*, 205 USPQ 1069, 1072 (CCPA 1980); *Ex parte Quadranti*, 25 USPQ2d 1071 (Bd. Pat. App. & Inter. 1992).

The Office states that the Examiner has duly considered the Applicant's arguments but deems them unpersuasive for the reason above and the further reasons below.

The scope of enablement rejection applied to prior broad claims, claiming mosquitoes in general. Since the claims are limited to those species which were enabled, the argument with respect to undue experimentation is not applicable herein. Further,

Smith et al. specifically discloses that the combination of lactic acid and carbon dioxide is effective for attracting *Aedes aegypti*. Since Wilson et al. discloses that dimethyl disulfide is an effective attractant for mosquitoes, one of ordinary skill in the art would have expected that adding dimethyl disulfide to the combination of lactic acid and carbon dioxide would also be attractive to *Aedes aegypti*.

The Office further states that therefore, the claimed invention as a whole, would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, because every element of the invention has been collectively taught by the combined teachings of the references.

Claims 46, 47, 53 and 54 have been cancelled in the present amendment.

The rejection of claim 49 and 55 under 35 U.S.C. 103(a) as being unpatentable over Smith et al. (Annals of the Entomological society of America 1970) in view of Carlson et al. (Yellowfever Mosquitoes: Compounds Related to Lactic Acid that Attract Females) is respectfully traversed.

The Office states that Smith et al. teaches that lactic acid and that the combination of lactic acid and carbon dioxide is an effective *Aedes aegypti* mosquito attractant (Pg. 766). The Office further states that Carlson et al. teaches that lactic acid is an effective *Aedes aegypti* attractant and that glycolic acid in combination with carbon dioxide is an effective *Aedes aegypti* mosquito attractant (Pg. 330, Table 1, pg. 331).

The Office further states that Smith et al. teaches that lactic acid and the combination of lactic acid and carbon dioxide are effective mosquito attractants. The difference between Smith et al. and the claimed invention is that Smith et al. does not expressly disclose compositions and methods consisting of glycolic acid, carbon dioxide and lactic acid. The Office further states that the prior art amply suggest the same. Carlson et al. disclose that lactic acid and glycolic acid and carbon dioxide are known in the art to attract mosquitoes. The Office further states that as such, it would have been well within the skill of and one of ordinary skill in the art would have been motivated to modify the prior art as above with the expectation that the combination of glycolic acid, carbon dioxide and lactic acid would be effective in attracting mosquitoes. See *In re*

Kerkhoven, 2085 USPQ 1069, 1072 (CCPA 1980); *Ex parte Quadranti*, 25 USPQ2d 1071(Bd. Pat. App. & Inter. 1992).

The Office states that the Examiner has duly considered the Applicant's arguments but deems them unpersuasive for the same reasons as above and the further reasons below

The scope of enablement rejection applied to prior broad claims, claiming mosquitoes in general. Since the claims are limited to those species which were enabled, the argument with respect to undue experimentation is not applicable herein. Further, Smith et al. specifically discloses that the combination of lactic acid and carbon dioxide is effective for attracting *Aedes aegypti*. Since Carlson et al. discloses that lactic acid and glycolic acid and carbon dioxide are an effective attractant for *Aedes aegypti* mosquitoes. As such, one of ordinary skill in the art would have expected that adding glycolic acid to the combination of lactic acid and carbon dioxide would also be attractive to *Aedes aegypti*.

The Office finally states that therefore, the claimed invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, because every element of the invention has been collectively taught by the combined teachings of the references.

Claims 49 and 55 have been cancelled by the present amendment

It is believed that all of the claims are in condition for allowance. Accordingly, it is respectfully requested that the instant application be allowed to issue. If any issues remain to be resolved, the Examiner is invited to telephone the undersigned at the number below.

In the event this paper is deemed not timely filed, the undersigned hereby petitions for an appropriate extension of time. Please charge any fees which may be required by this paper or at any time during prosecution of the instant application, or credit any overpayment, to deposit account 50-2134.

Respectfully Submitted,

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